## THE HABITAT OF ASTROPHYTUM ASTERIAS IN TEXAS

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A short article published in this journal reported Astrophytum asterias (Zucc.) Lemaire as occurring in the United States. Since that time the author has visited the locality in which it was found and studied the surroundings.

Very little is known concerning the habitat of this species in Mexico. In Texas the plant seems to be restricted to a limited area eight miles north of Rio Grande City, Starr County, and is undoubtedly indigenous since the region is uninhabited.

The geological formation here is known as the Reynosa, which is probably of Pliocene age. It consists of an intricate mixture of coarse and fine gravel cemented by a calcareous matrix and ranges in color from deep red and pink to gray or white. The plants usually occur on summits and sides of low red gravel hills and an occasional one may be found in the loose soil in shallow ravines. They are usually partially shaded by shrubs. The flat tops of the plants are on a level with the soil. This renders them extremely difficult to find, especially since a reddish dust often covers the surface. This cactus blossoms all summer and the pale yellow flowers with vivid red centers reveal the otherwise effectively hidden plants.

Astrophytum asterias resembles Lophophora Williamsii in its habit of growing in small groups. Sometimes solitary specimens are found, but more often they are grouped in numbers ranging from three to ten plants. Contrary to the Mexican report concerning plants associated with Astrophytum asterias, in Texas it is closely associated with several other species of cacti. A list of shrubs and cacti found in a typical area one hundred yards square is given below:

## CACTI

ASTROPHYTUM (Zucc.) ASTERIAS Lemaire

LOPHOPHORA aire) Coulter

ECHINOCEREUS ENNEACANTHUS Engelm.

ECHINOCEREUS PERBELLUS Britton & Rose

ECHINOCEREUS PENTALOPHUS DC.

<sup>1</sup> Rhodora 34: 227-228. 1932.

CORYPHANTHA RUNYONII Britton & Rose

WILLIAMSII (Lem- HAMATOCACTUS SETISPINUS Engelm. ESCOBARIA RUNYONII Britton & Rose

> NEOMAMMALARIA MULTICEPS (Salm-Dyck) Britton & Rose

NEOMAMMALARIA HEMISPHAERICA (Engelm.) Britton & Rose

Wilcoxia Poselgeri (Lemaire)
Britton & Rose

Ancistrocactus Scheerii Salm-Dyck Thelocactus bicolor (Galeotti)
B. & R.
Opuntia Leptocaulis DC.
Opuntia Lindheimeri Engelm.

## SHRUBS

LEUCOPHYLLUM TEXANUM Benth.
MIMOSA PALLIDA (Torr.) Planch.
Prosopis Juliflora Swartz

Koeberlinia spinosa Zucc. Karwinskia Humboldtiana Zucc. Yucca sp.

Until very recently this species of Astrophytum was unknown to the natives. The Mexicans now refer to it as "the other peyote." The cactus fanciers who do not learn the scientific names call it "sea urchin" or "star cactus," and some confuse it with Lophophora Williamsii (peyote), and think that it is the sacred cactus of the Indians.

This cactus is accustomed to adverse conditions since the average rainfall is 12 to 14 inches. However, it thrives in cultivation and responds well if placed in somewhat shaded surroundings and given more moisture than its native habitat affords. Some specimens in gardens of the Lower Rio Grande Valley have attained a diameter of seven inches.

The reader may think it strange that a species of cactus within eight miles of a large town was not found sooner. The territory north of Rio Grande City is a rather desolate hilly region covered with brush, and until recently was seldom visited by anyone except cow boys or deer hunters. Since oil has been discovered and several wells drilled, hundreds of spectators have flocked to the oil field, and among them people interested in collecting native cacti either for themselves or for commercial purposes. This inconspicuous plant has now become locally well known, and today rock-garden enthusiasts and dealers in cacti are roaming the red gravel hills, seemingly bent on exterminating this rare and unassuming species as effectively as our forefathers did the passenger pigeon and the American bison. The fact that Astrophytum asterias is so difficult to locate may be the means of prolonging its existence until the collecting craze is over.

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A Note on Glyceria neogaea Steudel.—While studying grasses at George Washington University the writer had occasion to read the following description of Steudel (Syn. Pl. Glum. 1: 285. 1854):